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Susan Smith, Special Assistant, Mailman School of Public Health
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# Neurosciences and Free Will

Third Biannual Fetzer Institute and CSSR Symposium

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In Spring 2008, the Center for the Study of Science and Religion at the Earth Institute, Columbia University, in collaboration with the Fetzer Institute of Kalamazoo, Michigan, is holding a public symposium to discuss Neurosciences and Free Will at Columbia University. For two days, this program will bring together leaders in the fields of neuroscience, physics, philosophy, psychology, and theology from a variety of religious traditions to discuss the scientific, philosophical, and moral questions raised by recent findings in the sciences on free will.

The symposium will be held at Columbia University, Sunday and Monday, March 30-31, 2008.

We are looking forward to an exciting and distinguished group of people contributing to the exploration of this topic. The following speakers have confirmed their participation:

- Paul Appelbaum, Psychiatry, Law and Medicine, Columbia University
- David Helfand, Astronomy, Columbia University
- David Krantz, Psychology, decision making, reasoning and abstract measurement, Columbia University
- Alan Mittleman, Jewish Theology, Jewish Theological Seminary
- Charles Townes, Nobel Laureate, Physics, UC Berkeley
- B. Alan Wallace, Consciousness Studies, Santa Barbara Institute

Distinguished professors, Nobel Prize winners and religious scholars will discuss Neurosciences and Free Will in a symposium sponsored by the Fetzer Institute to be held March 30-31, 2008 in the Low Rotunda, Columbia University.

This program is the third in a series of symposia sponsored by the Fetzer Institute on the science of spiritual questions. The first symposium, Love and its Obstacles, examined love, religion, and power. Mind and Reality, held in 2006, enriched the dialogue among Buddhism, Hinduism and contemporary consciousness studies. For comprehensive archives of previous symposia in our series, visit these sites:

- www.earth.columbia.edu/events/2004/love/description.html
- www.mindandreality.org

Please watch the CSSR website in the coming months for more information regarding the “Neurosciences and Free Will” symposium or email Eleni Nikitopolous at en2142@columbia.edu
Letter from the Director

It has been about nine months since our last Newsletter, and so it is perhaps not altogether surprising that we have the sort of important news to report that often takes about that time.

Since the founding of the CSSR in 1999, we have been supported in fiscal and intellectual terms by a group of faculty and administrators at Columbia, whose early interest in sustainable development as a global obligation led to the formation of the Earth Institute.

As one of the centers within the Earth Institute, we have seen first-hand the emergence of an ever-greater consensus among scientists and policy experts, that the warming of the planet and our species’ unbalanced use of the world’s non-replaceable resources need to be corrected. But before any error can be corrected, it must be acknowledged. That has turned out to be difficult: the worse the facts get, the harder it is to get many people to pay proper attention to them.

This year, for the first time, the CSSR will undertake a collaborative effort within the Earth Institute, to see whether the insights of various religions might offer us new ways to get these disturbing facts fully heard and acted upon. The first of these insights is of course the most general: the case that sustainable development is a matter of good and evil, that is, a moral obligation.

In keeping with this new commitment, we have invited members of the CSSR’s Advisory Board to give us short essays on this matter, from their own specific viewpoints. The first of these is a letter from Rabbi Adin Steinsaltz, director of The Israel Institute for Talmudic Publications, on the occasion of the Jewish New Year.

—Robert Pollack, Director, CSSR

Rabbi Steinsaltz’s New Year’s Letter

17 September 2007
5 Tishrei 5768

The coming year is a long year, a leap year, which, like all other years, opens up new possibilities and creates new opportunities. There are good hopes, and even good beginnings, on the one hand, and fears and worries on the other.

At all times and periods, from the outset, man’s plans and expectations, as well as Heaven’s decrees, are not defined or clear. Even things that follow a predetermined course may still have different meanings and results, depending on man’s free choice. We can choose a good path or its opposite, and thus cause things to be open to the good, to salvation and relief, or toward the abysses of downfall.

This ability of ours to outline the meaning of the coming times is a source of both hope and apprehension. We are just as capable of building and planting as we are of pulling down and destroying (see Jeremiah 1:10), and we must examine our soul and correct it, so that we can take the right path and make the proper decisions. On Rosh HaShanah and the ensuing holy days we can make good decisions and take upon ourselves to rectify the past and elevate the future. We should also pray fervently for the ability to implement our good decisions, to change the negative things and not to get carried away by the mistakes and sins of our past.

And just as we can strive to do things by and within ourselves, so we can also try to help others to think good thoughts, make positive statements and do things that will have only a good outcome.

With best wishes for a good and sweet year in both substance and spirit,

—Adin Even-Israel Steinsaltz

Read more of Rabbi’s thoughts on science and religion at http://newsweek.washingtonpost.com/onfaith/adin_steinsaltz/
Sheldon Krimsky, Advisory Board Member and Visiting Scholar

The Center (CSSR) has initiated a lecture series that showcases frontier issues in science, ethics and religion. As advisor to the Center, I was asked if I had a lecture idea. The request came at a time I had immersed myself in the issue of using human subjects to test non-therapeutic agents, such as pesticides, ozone, and radiation. My lecture was scheduled about a year after the Environmental Protection Agency issued guidelines to private companies who intended to use human subjects to test pesticides. The toxicological data from those tests would then be submitted to the agency to increase the maximum residue levels on food, in other words to save the companies money.

As a rational non-sectarian bioethicist I felt it was my obligation to investigate all sides and nuances of the issue. I also took the opportunity to review the ethical codes that have been the sources for our current moral thinking about the use of human subjects.

The lecture at CSSR taught me an important lesson. Most people had no idea there was a tectonic shift in the moral behavior of our government on the use of human subjects. Thereafter, I decided that informing the medical and public health communities would be a good beginning to get the message out. This led to the essay in *JAMA*.

(Article cited in Recent Publications section on page 13.)

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Erin Lothes, Earth Institute Research Fellow

For a theologian concerned about global warming, joining the CSSR as an Earth Institute Fellow is an extraordinary opportunity to explore the religious dimensions of the environmental crisis among scientists at the cutting-edge of knowledge about the earth. My research at the CSSR is directed toward writing a multidisciplinary and theologically grounded critique of contemporary behavior vis-à-vis the environment. I am particularly interested in the existential dynamics of coming to understand the ecological crisis, recognizing the impact of one’s actions, and deciding to make sustainable changes — or not.

As an English major at Princeton University, I explored literature as one way to study the human condition. I later chose to study theology at Boston College, and continued with doctoral studies in contemporary systematic theology at Fordham University. One of my aims was to clarify and articulate responsibility to the environment in religious terms, as I began to understand climate change as a serious threat to human well-being, global peace, and a tragic desecration of the earth’s beauty. While the mystery of human self-destructiveness is an ancient theological question, it takes a sharp new form in the totality and irrationality of ecological devastation. The persistence of perhaps willful confusion and apathy invites a look beyond the essential scientific information, using religious interpretive frameworks and complementary insights from evolutionary biology, psychology and economics. These perspectives are all part of the diverse intellectual conversations hosted by the CSSR, in which I am very fortunate to share.
2007 CSSR-SURF Participants: Kelly Treder and Alex Port

Kelly Treder is a senior in Columbia College majoring in Psychology. She plans to attend medical school and concurrently pursue a Master’s in Public Health. Currently, Kelly is assisting CSSR with its upcoming Neurosciences and Free Will Symposium, among other projects.

Alex Port is a junior in Columbia College majoring in Biology. He plans to attend medical school, and is currently continuing to research palliative care and pain management at Terrence Cardinal Cooke Nursing Center.

As CSSR-SURF participants, Kelly and Alex conducted research into the pain management of patients unable to report on their pain at Cabrini Center for Nursing and Rehabilitation. Alex describes their experience in the following essay.

“"The End Result of Wisdom Is Good Deeds”": The 2007 CSSR Summer Urban Research Experience

By Alex Port

The beauty of the above aphorism, from the Babylonian Talmud, is that it is both a friend to the disillusioned student and a guide to thewayward one. It reminds me why I chose to wade through the morass that is the premedical curriculum, and at the same time serves as a check if I get haughty. Although sometimes it is difficult to find the connections between knowledge and application, nevertheless the challenge to produce positive action from understanding remains.

To that end, this summer I was presented with both the opportunity to learn and the challenge to produce research that might teach and inspire others to provide better palliative care. I had the privilege to conduct research through the CSSR-Summer Undergraduate Research Fellowship (CSSR-SURF), and to work with Dr. Jeffrey Nichols of the Cabrini Center for Nursing and Rehabilitation. We discovered from relevant literature that elderly patients, specifically those with dementia, were under-medicated for pain. Untreated pain can vastly diminish a patient’s quality of life, and can cause a loss of sleep, loss of appetite, agitation, and general discomfort. We found ourselves in a position to study the management of pain and possibly effect positive change in the way that pain was treated. Knowing that we should do for others what we would want done for ourselves, we jumped at the opportunity.

Under Dr. Nichols’ guidance, Kelly Treder (the other CSSR-SURF intern) and I devised a chart-based study to determine what factors contribute to the disparities in the amount of analgesics given to nursing home residents. We identified patients with chronic pain, based on their diagnoses, and catalogued subjects based on demographic factors such as sex, race, native language, cognitive status, and nursing floor. What we found was that among the demographic groups, women received more analgesics than men, and native English speakers received more pain medications than patients whose first language was not English, and dementia patients received less analgesics than their cognitive floor-mates. But, the most interesting conclusion was that the average medications varied most by nursing floor. Each nursing floor at the CCNR has its own staff, so nursing floor was effectively a proxy for how different nursing teams performed. The large differences between floors means that nursing staff were the deciding factor in the quality of care given. The conclusion is simple: to improve the quality of palliative care, nursing staff need to be better trained in the identification of pain.

At first our internship seemed like a misfit, both in the laboratory-oriented SURF program as well as among the CSSR’s extensive repertoire of lectures and symposia, but with everything said and done, I think that we filled our niche just right. True to the CSSR’s ideals, our research is the confluence of scientific method and religious morality. We saw a group of people unable to advocate for themselves, and sought to improve their quality of life through research. What we found are factors that greatly affect individual care, and that nursing staff can easily become attuned to, and thereby identify and treat pain better.

For more information about CSSR-SURF, visit http://www.columbia.edu/cu/cssr/CSSR-SURF/about.html
Science, Religion and Politics: A Clash of Cultures
Tuesday, January 22, 6:00-7:30 p.m.
Davis Auditorium, Columbia University

Kenneth Edelin, Professor of Obstetrics and Gynecology; Associate Dean, Students and Minority Affairs, Boston University School of Medicine

Dr. Ken Edelin, a young, black doctor, arrived in Boston in 1971 to do his residency training in Obstetrics and Gynecology at Boston City Hospital. In April 1974 he was three months away from completing his residency when he was indicted on a charge of manslaughter by a secret grand jury. The indictment concerned an abortion he had performed on a 17-year old girl, and the alleged victim was her aborted fetus. In January of 1975 his sensational six-week trial began before a jury which was all white, predominantly male and overwhelmingly Catholic. The dynamic confluences of race, sex and revenge played out in a Boston courtroom. The bitter determination of the prosecuting attorney to impose his personal religious views as the law of the land provided important lessons as we struggle to reach a new social compact for the 21st Century; equal rights for people of both sexes and all races remains central to our national debate.

The Beak of the Finch: A Story of Evolution in Our Time
Thursday, February 14, 2008, 6:00-7:30 p.m.
Davis Auditorium, Columbia University

Jonathan Weiner, Professor, Graduate School of Journalism, Columbia University

The Language of God: A Believer Looks at the Human Genome
Thursday, February 28, 6:00-7:30 p.m.
Davis Auditorium, Columbia University

Francis Collins, Director, Human Genome Project

Are science and faith locked in an unavoidable battle of world views? Must one win and the other lose? No, says Francis Collins, a physician-geneticist who led the Human Genome Project in its historic program to read out all of the letters of the human DNA instruction book. Faith is one way of knowing; science is another. Both aim to reveal truth, but each answers different kinds of questions. Science tells us how; faith tells us why.
CSSR seminars provide a formal setting in which scholars and amateurs can equally engage subjective religious experience and objective quantifiable data.

The Role of Man, if any, in the Computer Age: Is there Such a Thing as Too Much Imagination?
Wednesday, March 19, 2008, 6:00-7:30 p.m.
Congregation Ramath Orah, 550 W. 110th St, NY, NY (between Broadway and Amsterdam)

Dr. Norman Lamm, Chancellor of Yeshiva University

The History of History
Thursday, April 10, 2008, 6:00-7:30 p.m.
Davis Auditorium, Columbia University

Ann Kirschner, Dean, CUNY Honors College and Author of Sala’s Gift: My Mother’s Holocaust Story.

Ann Kirschner became a historian by accident, when her mother revealed the existence of hundreds of letters that she received while imprisoned in Nazi slave labor camps. A daughter’s special, deeply personal relationship to her mother’s history raised an unusual set of challenges about her own role as story-teller, and also about historical narratives that change as technology affects formats, research methodology, styles, and our ideas about truth.

Producing Race and Religion: Ethnography and the Theological Advent of the Modern World
Thursday, April 17th, 2008, 6:00-7:30 p.m.
Davis Auditorium, Columbia University

J. Kameron Carter, Associate Professor, Theology and Black Church Studies at Duke University

Michel Foucault once observed, and rightly so, that the invention of modern man could not be understood apart from the invention of the human being as the bearer of race. Moreover, he saw but insufficiently developed the connections between the production of man as the bearer of race and the modern invention of homo religiosus. This seminar develops Foucault’s suggestive claim by examining how race and religion, as categories of thought grounded as it were on empirical observation about newly discovered peoples, were produced in the late medieval/early renaissance advent of the modern world. More specifically, it explores their production as tied to the intellectual revolution spawned in the 16th century, particularly in Spain, in the wake of the late 15th century event of New World conquest and discovery, a revolution led by theologians. Far from emerging out of a break with theology, modernity is born of a transformation within theology, a transformation tied to the production of discourses of race and religion.

Advance registration is required for all CSSR seminars. RSVP at www.columbia.edu/cu/cssr/rsvp.html

Special note: Not all seminars in Spring 2008 will be held in Davis Auditorium. Rabbi Norman Lamm’s seminar of March 19th, 2008 will be held at Congregation Ramath Orah at 550 W. 110th St, between Broadway and Amsterdam Avenue.

All seminars are free and open to the public. Refreshments will be served. For directions and more information visit www.columbia.edu/cu/cssr/calendar.html

The CSSR Seminar Series is supported by funds from the Fetzer Institute, the Ford Foundation, The Earth Institute, and Friends of the CSSR.

Recent Fall 2007 Seminars

Designing Earthlings: Unifying Reason and Values to Meet the Challenges We Face
Peter Eisenberger, Professor of Earth and Environmental Sciences, Columbia University

Memories: Impact on the Present and the Future
Ethel S. Person, M.D., Professor of Clinical Psychiatry, Columbia University

Cold Evil: Technology and Ethics in the 21st Century
Andrew Kimbrell, Director, International Center for Technology Assessment

All seminars will be available as DVDs usually within the semester following their presentation. For more information on past seminars, visit our web site at: http://www.columbia.edu/cu/cssr/past_events.html or to order DVDs of past seminars, visit www.columbia.edu/cu/cssr/store.html
## DNA, Evolution and the Soul — January 7-10, 2008

Evolution, stem cell research, genetic counseling, reproductive technologies, beginning and end of life questions: responding to today’s hotly contested issues requires both pastoral sensitivity and scientific knowledge.

This ground-breaking course offers participants the biology background necessary to understand the complex scientific and medical issues that emerge in pastoral care. Participants will have an opportunity to discuss the theological and pastoral implications of recent advances in medical science while gaining practical knowledge that will enhance their ministries. In addition, participants will have the opportunity to explore these issues outside of the classroom through visits to museums or laboratory facilities in New York City.

This course is based on the full credit Union Theological Seminary course in Christian Ethics, ce220 DNA, Evolution and the Soul, taught by Robert Pollack and Erin Lothes.

For more info contact Cynthia Peabody at cmr93@columbia.edu or Auburn Theological Seminary at (212) 662-4315 or on the web at http://www.auburnsem.org

Instructors: Robert Pollack, Professor of Biology, Columbia University; Cynthia Peabody, Director, Science and Religion Resource Center

## Beyond the Human Scale: Cosmology, Ecology, and Faith — Summer 2008

We move from the furthest points in the outer universe to the smallest known particles in the quantum world with stops in between to examine how this information impacts our faith and how we should act.

This ground-breaking course offers participants the scientific background necessary to engage in the most universal questions of both science and religion by examining the human role in nature from infinitely large scales to the very small. Participants will learn the state of the art in cosmological science, evolutionary biology, quantum mechanics and more by exploring the science behind questions of the ultimate fate of the universe, the uniqueness of humanity on this planet, the wave-particle nature of reality, the state of the biosphere, how humans are altering the climate and how our biology interacts with our ethics.

### Syllabus

**Day 1: In the Beginning**

The Cosmos

**Day 2: The Reality of the Very Small**

Quantum Mechanics

**Day 3: The Changing Biosphere**

Evolution, the arrival of humans, and climate change

**Day 4: The Nature of the Ecological and Ecological Nature**

Ethics from an informed biology

DNA and Civil Society: Rights, Liberties and Reason in the Biotech Age — Summer 2008

Since the scientific publication of the structure of the DNA molecule by James Watson and Francis Crick in 1953, DNA (and genetics) has become the source of cultural fascination, public angst and societal myths of infallibility. A brief survey of popular movies like Jurassic Park, Gattica and Next and of the many TV crime programs show how DNA has shaped the popular media and public understanding of genetics. This short course will examine several areas where DNA meets civil society including the early debates over science’s foray into genetic engineering, public apprehension over genetically modified foods, patenting and the ownership of genes, the role of DNA in forensic science, otherwise known as the CSI effect, and the new eugenics. The course will explore fundamental value questions such as: 1) Does the public have a role in restraining science and/or technology? 2) When does a potential risk of a new technology rise to the level of regulation or social control? 3) Do we have an expectation of privacy for our DNA? 4) Can and should society restrict the use of DNA technology in reproduction?


Syllabus

Session 1: The Science and Iconography of DNA.
What a gene is; what genes can and cannot do; early history of recombinant DNA; science meets the City of Cambridge: a retrospective; the science and ethics of forensic DNA identification; what the human genome is and what it can tell us; new applications of genetics; behavioral; ancestral; individualized medicine; germ line genetic engineering; transgenic animals and plants.

Session 2: Genetically modified food and animals.
Societal and religious attitudes in mixing food types; Mary Douglas notion of pollution and taboo in the light of modern genetics; transgenic animals: the sacred and the profane; cloning animals for food; how different societal and religious belief systems view genetically modified food types.

Session 3: Ownership of Genes.
How we got to patenting of life forms; religious and social attitudes about patents for plants, animals, cell lines and genes; the Diamond v. Chakrabarty decision and the oil eating microbe; patents for the oncomouse and for breast cancer genes; arguments for and against patents on life forms; the case of John Moores cells; patent application for a human-animal chimera.

Session 4: Behavioral Genetics.
Behavioral genetics has become a new way to view social pathology, sexual preference, and criminality. Sociobiologists search for a criminal gene, a gene for male chauvinism, maybe a gene for pedophilia; deviant behavior rooted in genetics; the case of XYY males; discovery of the MAOA gene and antisocial behavior; warrior genes in New Zealand; social, ethical and religious implications of research into the gay gene.

Session 5: Forensic DNA Science.
The rise of DNA identification; DNA databanking; the Innocence Project and exonerations of falsely convicted individuals; The FBI CODIS system; DNA dragnets; John Doe DNA prosecutions and the statute of limitations.

Session 6: Privacy, Justice and Ethics in DNA Databanking.
How forensic DNA databanks operate; what limits should be imposed; whose DNA should be uploaded on the national databank; how will expansion of DNA databanks affect the racialized criminal justice system.

Session 7: The Ultimate Power: Designing Children.
Positive and negative eugenics; pre-implantation embryo selection; individualized vs. societal eugenics; genetic screening: how far and to what end; somatic cell gene modification; the Jesse Gelsinger case; human cloning: because it can be done, should it be done; a discussion of alternative belief systems on cloning human beings.

Session 8. Beyond Selection.
Genetic modification of the germ line: anathema or the hope for a more intelligent, more disease resistant, and more communitarian society. Religious and ethical views on modifying the human germ line.

Instructor: Sheldon Krimsy, Urban & Environmental Policy & Planning, Tufts University; Public Health and Family Medicine at the Tufts School of Medicine

For information regarding this course, including venue and dates, please inquire at CSSR@columbia.edu or by phone, (212) 854-1673.
The CSSR and Riverside Church have introduced a Science and Religion Resource Center (SRRC) at Riverside. This exciting new project will allow the CSSR to move outside academia and into the larger community. We have worked closely with Riverside clergy and staff to design programs that take full advantage of the CSSR’s staff expertise, research, outside lecturers, and interdisciplinary workshops. Beginning this September, on the fourth Sunday of every month, the SRRC has will host a Village Forum open to Riverside congregants and their Morningside and Harlem neighbors. The Village Forums will be concerned with such issues as sustainable development, genetic testing, religious responses to the environmental crisis, women’s health, and disaster preparedness. The SRRC has already collaborated with Riverside’s youth ministry on a discussion of the earth science behind Hurricane Katrina. To date CSSR staff has conducted Open Bible Study meetings on cosmology and genesis, memory and slavery, and Old Testament reflections on memory. This fall we look forward to Open Bible Study meetings around DNA testing, stem cell research, and euthanasia.

Rev. Arnold Thomas, Minister of Education at Riverside, has made Room 427 MLK available to the SRRC. Friends and advisors of the CSSR are invited to all SRRC functions and we welcome any creative suggestions for the SRRC’s involvement at Riverside. Cynthia Peabody is the CSSR Director of the SRRC. Interested persons are welcome to contact her with questions and/or comments at cmr93@columbia.edu.

SRRC’s Fall 2007 Village Forums at Riverside Church:

Columbia’s Expansion into West Harlem:
Panel Presentation and Community Discussion
September 23, 1:00 p.m. – 3:00 p.m., Room 9-Tower

Facilitator: Rev. Dr. Arnold Isidore Thomas. Panelists: Sharyn O’Halloran, Professor of International and Public Affairs at Columbia; Mindy Fullilove, Professor of Clinical Psychology and Public Health at Columbia and author of Root Shock: How Tearing Up City Neighborhoods Hurts America, and What We Can Do About It; and Rev. Dr. Earl Kooperkamp, Rector of St. Mary’s Episcopal Church.

Coordinating Our Care: New York City, Disaster Preparedness, and The Church

October 28, 1:00 p.m.–3:00 p.m., Room 9-Tower

Facilitator: Dr. Robert Pollack. Panelists: Dr. John Mutter, Professor of Earth and Environmental Science at Columbia; Rev. Dr. Will Ashley, Director of the Department of Pastoral Care, Council of Churches of the City of New York; Rev. Dr. Martha Jacobs of Healthcare Chaplaincy; and Peter B. Gudaitis Chief Executive Officer of New York Disaster Interfaith Services.

Peace Traditions of the Abrahamic Faiths

November 25, 1:00 p.m. – 3:00 p.m., Room 9-Tower


A Developing Research Agenda for Theology and the Environmental Crisis

Presentation by Erin Lothes and Cynthia Peabody to the UN

On Tuesday, 19 June 2007, Cynthia Peabody and Erin Lothes of the CSSR presented the Center’s developing research agenda in religion and ecology for The Interfaith Partnership for the Environment. The Interfaith Partnership for the Environment is a coalition of religiously-affiliated NGOs within the United Nations Environment Programme at its New York Office. The presentation was the third in a series of talks hosted by the IPE this spring, as part of an effort to call attention to religious engagement on the environment. The gathering took place at UNEP/NYO Conference Room at 2 United Nations Plaza.

Cynthia and Erin reviewed the mission and activities of the CSSR, then reflected on the synergy of scientific concern for
sustainability and religious insight in an emerging alliance of science and religion. While science provides essential clarity and urgency about our understanding of the earth, religious thinkers are reinterpreting classic statements of belief and value and taking a moral stance to defend the sacred in the earth and its peoples. They noted that the CSSR’s research agenda will consider the moral and ethical dimensions of the environmental crisis, and draw on cosmology and ecology to think beyond the human scale and re-examine cooperation as a fundamental interaction in nature and society.

In the discussion that followed, representatives of an Indian Hindu monastic community, a Japanese Buddhist NGO, Quaker and Franciscan groups, and others, shared their insights about how signs of a critically needed new relationship to the earth is developing around the globe, and the distance yet to go.

**CSSR Awarded $10,000 Supplemental Grant by Metanexus Institute for “Organizational Excellence, Creative Programming”**

by Erica L. Vinskie, Assistant Editor, *Global Spiral; Membership Manager, Metanexus Institute*

What really is the science and religion dialogue all about? Or more to the point, what motivates the question of the relation between science and religion in the first place? This was the challenge of Metanexus Institute’s Eighth Annual Conference, *Transdisciplinarity and the Unity of Knowledge: Beyond the Science and Religion Dialogue*. Over 300 scholars from 41 countries gathered at the University of Pennsylvania, June 2-6, to engage in transdisciplinary exploration of some of humanity’s most pressing and profound questions and challenges. Participants probed issues of freedom, personhood, environmental ethics, healthcare, inter-religious dialogue, education, and of course, the relationship between religion and science.

But what of going beyond the science and religion dialogue? Metanexus Executive Director, Eric Weislogel, had this to say in his opening remarks: What we have tried to do with this year’s Metanexus conference is to move beyond laying the foundations for the science and religion dialogue and to open our eyes to the transformations that might come about as a result of this constructive engagement between and beyond disciplinary, institutional thinking. He added, The creation and networking of interdisciplinary and inter-institutional metanexus groups via the Local Societies Initiative and its successor program constitute a vehicle for the reform we envision.

Metanexus awarded $90,000 in supplemental grants to nine outstanding local societies (among them the CSSR at Columbia University) in recognition of their organizational excellence, creative programming, and spirited commitment to fostering constructive engagement, and their contribution to the unity of knowledge through the transdisciplinary exploration of science and religion.

**Columbia University Faculty Seminar on Memory and Slavery**

Last year was the inaugural year of the CSSR-sponsored University Seminar on Memory and Slavery. The seminar is co-chaired by Bob Pollack and Prof. Pat Williams of Columbia Law School; its members hail from major academic, religious and public institutions throughout the New York area. Once a month they gather for a lecture and lively discussion. Last year’s guest lecturers included James Campbell, Chair of the Brown University Steering Committee on Slavery and Justice; Christopher Moore, Curator and Research Coordinator, Schomburg Center for Research in Black Culture; Michael Smith and David Voreacos, Reporters from Bloomberg Markets investigating modern slavery; Troy Duster, Professor of Sociology, New York University; David Blight, author of *Race and Reunion: The Civil War in American Memory*; and J. Kameron Carter, Assistant Professor of Theology & Black Church Studies, Duke University, The Divinity School & The Graduate Faculty of Religion.

This September the Seminar on Memory and Slavery resumes with a lecture by Don Shriver, author of *Honest Patriots: Loving a Country Enough to Remember Its Misdeeds*. We also look forward to an October presentation by Saidiya Hartman, author of *Lose Your Mother: A Journey Along the Atlantic Slave Route* and *Scenes of Subjection: Terror, Slavery and Self-Making in the 19th Century*. November brings Nicolas Lemann on his book *Redemption: The Last Battle of the Civil War*.

David Greder, an M. Div. student at Union Theological Seminary, coordinates this seminar. Please write to him at dg2359@columbia.edu with inquiries.
Hidden Dimensions: The Unification of Physics and Consciousness
B. Alan Wallace

Bridging the gap between the world of science and the realm of the spiritual, B. Alan Wallace introduces a natural theory of human consciousness that has its roots in contemporary physics and Buddhism. Wallace’s special theory of ontological relativity suggests that mental phenomena are conditioned by the brain, but do not emerge from it. Rather, the entire natural world of mind and matter, subjects and objects, arises from a unitary dimension of reality that is more fundamental than these dualities, as proposed by Wolfgang Pauli and Carl Jung.

To test his hypothesis, Wallace employs the Buddhist meditative practice of samatha, refining one’s attention and metacognition, to create a kind of telescope to examine the space of the mind. Drawing on the work of the physicist John Wheeler, he then proposes a more general theory in which the participatory nature of reality is envisioned as a self-excited circuit. In comparing these ideas to the Buddhist theory known as the Middle Way philosophy, Wallace explores further aspects of his general theory of ontological relativity, which can be investigated by means of vipasana, or insight, meditation. Wallace then focuses on the theme of symmetry in reference to quantum cosmology and the problem of frozen time, relating these issues to the theory and practices of the Great Perfection school of Tibetan Buddhism. He concludes with a discussion of the general theme of complementarity as it relates to science and religion.

The theories of relativity and quantum mechanics were major achievements in the physical sciences, and the theory of evolution has had an equally deep impact on the life sciences. However, rigorous scientific methods do not yet exist to observe mental phenomena, and naturalism has its limits for shedding light on the workings of the mind. A pioneer of modern consciousness research, Wallace offers a practical and revolutionary method for exploring the mind that combines the keenest insights of contemporary physicists and philosophers with the time-honored meditative traditions of Buddhism.

More Books in this Series:

Robert E. Pollack, Series Editor

The books in this series can be ordered online from Columbia University Press at http://www.columbia.edu/cup/catalog/data/CSSR.htm

Practicing Science, Living Faith: Interviews with Twelve Leading Scientists
Edited by Philip Clayton and Jim Schaal, with a forward by William Phillips, winner of the 1997 Nobel Prize for Physics

Spirit, Mind, and Brain: A Psychoanalytic Examination of Spirituality and Religion
Mortimer Ostow

The Faith of Biology and the Biology of Faith
Robert E. Pollack

William James and a Science of Religions: Reexperiencing The Varieties of Religious Experience
Edited by Wayne Proudfoot

Buddhism and Science: Breaking New Ground
Edited by B. Alan Wallace

Contemplative Science: Where Buddhism and Neuroscience Converge
B. Alan Wallace with the assistance of Brian Hodel

Environmental Ethics, Ecological Theology and Natural Selection
Lisa Sideris
Select Recent Publications by Faculty, Staff and Colleagues

Appelbaum, D.M. and Appelbaum, Paul

Balmer, Randall

Berger, Maurice

Efron, Noah J.

Johnson, Elizabeth A. and McPhearson, P. Timon

Krimsky, Sheldon and Simoncelli, Tania
“Testing Pesticides in Humans: Of Mice and Men Divided by Ten.” JAMA, June 6, 2007; 297: 2405-2407 (See author’s comments on page 4 in People section.)

Lothes Biviano, Erin

Pollack, Robert

Rosenfield, Allan, Min, Caroline J., and Freedman, Lynn P.

Sloan, Richard

Williams, Patricia

For Spring 2007 CrossCurrents released a special issue dedicated in large part to the work of the CSSR. This and other issues of CrossCurrents can be found on the web at www.crosscurrents.org
Let us know what you think of the work of the CSSR

Contact us by email to the director at pollack@columbia.edu, or by simply writing to us at the address listed below. We also invite you to become a Friend of the CSSR.

To become a Friend of the CSSR, visit our website, and check out T-Shirts and available DVDs, including the first Fetzer Institute/CSSR symposium, “Love and Its Obstacles”, at www.columbia.edu/cu/cssr/store.html